

**ABSTRACT OF THE DISCLOSURE****5      APPARATUS AND METHOD FOR INTERSYSTEM LOCK OPTIMIZATION**

          An apparatus and method for distributed intersystem  
lock optimization are provided. With the apparatus and  
method of the present invention, the time required to  
10 obtain an uncontested lock, meaning a lock that no other  
program or process in the distributed system is  
simultaneously attempting to acquire, is minimized. The  
apparatus and method of the present invention increases  
the speed with which locks are acquired by splitting the  
15 process of obtaining a lock into two separate operations:  
a test for contention, and then if contention exists, a  
full lock operation. The test for contention is made  
fast by associating each lock with a memory location, and  
using an atomic operation or the like, to atomically set  
20 the memory location associated with the lock to a  
different value. If the lock is found to be contested,  
meaning that another program or process has already  
locked it, control is turned over to a slower operation  
than ensures that the lock-requesting program or process  
25 will eventually be granted the lock.

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